

# Notice of Allowability

Application No.

10/080,748

Examiner

Joseph F Weiss Jr.

Applicant(s)

BISCHOFF, JOSHUA A.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to AMDT DTD 29 Jan 04.
2. ☒ The allowed claim(s) is/are 1-7, 9-13 and 15-22.
3. ☒ The drawings filed on 22 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 25.03.04.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. John Buser on 25 Mar 04.

The application has been amended as follows:

The claims have been rewritten as follows:

1. A device mountable on an airway tube, the device comprising:

a housing mountable on a distal end of an airway tube having a central port in fluid communication with the tube and a distal port for fluid communication with atmospheric air, the distal port having an inlet for receiving the air and an outlet for delivering the air to the central port; and

a valve supported within the housing and in fluid communication with the ports, the valve movable to an open position during inhalation to permit air to flow from the distal port into the central port to deliver the air to a user's respiratory system, the valve further being movable from the open position to a closed position during exhalation to substantially prevent air flow from exiting the user's respiratory system through the distal port such that a substantial portion of the exhalation air can flow past the user's vocal cords.

2. The device of claim 1, wherein the housing is removably attached to the tube's distal end.

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3. The device of claim 1, wherein the housing comprises a threaded periphery, and the device further comprising a decorative cover thread able upon the housing's threaded periphery.
4. The device of claim 1, wherein the valve comprises a substantially flat flexible element.
5. The device of claim 4, wherein the valve comprises a substantially flat flexible element hinged to the housing and a valve cover is shaped to surround a periphery of the valve and secure the valve in place by pressure exerted thereto by the cover.
6. The device of claim 4, wherein the housing comprises a central axis at a center point of the central port and a valve axis at a center point of the valve, the valve axis offset from the central axis
7. The device of claim 1, wherein the housing comprises a lock to lock an outer flange connected to the tube and a decorative flexible necklace attached to the flange and adapted to encircle a user's neck.
8. (Cancelled)
9. A device mountable on an airway tube, the device comprising:
  - a cap;
  - a housing secured to the cap and mountable on a distal end of the tube, the housing having a central port for fluid communication with the tube and a distal port in fluid communication with atmospheric air, the distal port defined by a channel extending from an inlet to an outlet and covered by the cap such that the

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covered channel provides a passageway for air received at the inlet to be communicated to the outlet for delivery to the central port; and

a valve supported within the housing and in fluid communication with the ports, the valve operable during inhalation to permit air to flow from the distal port into the central port to deliver the air to a user's respiratory system, the valve further operable during exhalation to substantially prevent air flow from exiting the user's respiratory system through the distal port such that a substantial portion of the exhalation air can flow past a user's vocal cords.

10. The device of claim 9, wherein the housing comprises a lock for locking an outer flange connected to the tube and at least one necklace end removably attached to the housing.

11. The device of claim 9, wherein the valve comprises a seat and a substantially flat valve element cooperative with the seat to close the valve during exhalation for preventing air flow to the distal port.

12. The device of claim 9, wherein the housing comprises a circular threaded periphery, the cover having threads cooperating with the housing periphery threads to secure the housing thereto.

13. The device of claim 11, wherein the housing comprises a relief for locking to a protrusion on a base connected to the tube, the base having an outer surface and decorations defined on an outer surface of the base.

14. (Cancelled)

15. A valve device for use with an airway tube to deliver air to

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a user's respiratory system during inhalation and to prevent air flow from exiting the tube during exhalation so that the air can flow past a user's vocal cords, the valve comprising:

a housing having a central port in fluid communication with the tube and a distal port for fluid communication with atmospheric air, the distal port having an inlet for receiving the air and an outlet for delivering the air to the central port;

a valve supported within the housing and in fluid communication with the ports, the valve having a flap movable to a first position during inhalation to permit fresh air to flow from the distal port into the tube, the flap further movable to a second position during exhalation to block the distal port and thereby prevent air flow from exiting the tube so that the air can flow past the user's vocal cords.

16. (New) The valve device of claim 15, wherein the distal port comprises a channel extending from the inlet to the outlet, and the device further comprising a cap covering the housing such that the cap covers the channel to define a passageway for air received at the inlet to be communicated to the outlet for delivery to the central port.

17. The valve device of claim 16 wherein the distal port's inlet and the central port are on a same side of the housing and are not covered by the cap.

18. The valve device of claim 16 further comprises a valve cover to secure the valve to the housing by compression provided by the cap, the valve having a first side in contact with the housing and a second side in contact with the cap.

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19. The valve device of claim 18, wherein the valve cover further comprises a post to offset the valve from the cap such that air can flow from the distal port to the central port during inhalation.

20. The valve device of claim 15, wherein the outlet of the outer port is offset from the central port.

21. The valve device of claim 15, wherein the housing only comprises the valve, the valve cover, and the cap to limit a thickness of the valve device.

22. The valve device of claim 21, wherein the thickness is less than 3/8 inches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph F Weiss Jr. whose telephone number is 703-305-0323. The examiner can normally be reached on M-F, 8-4.

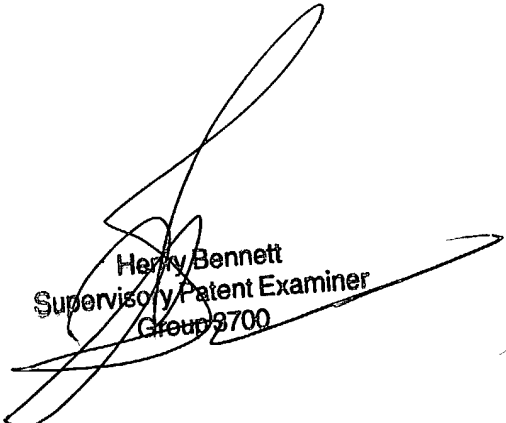
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett can be reached on 703-308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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3/25/04



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